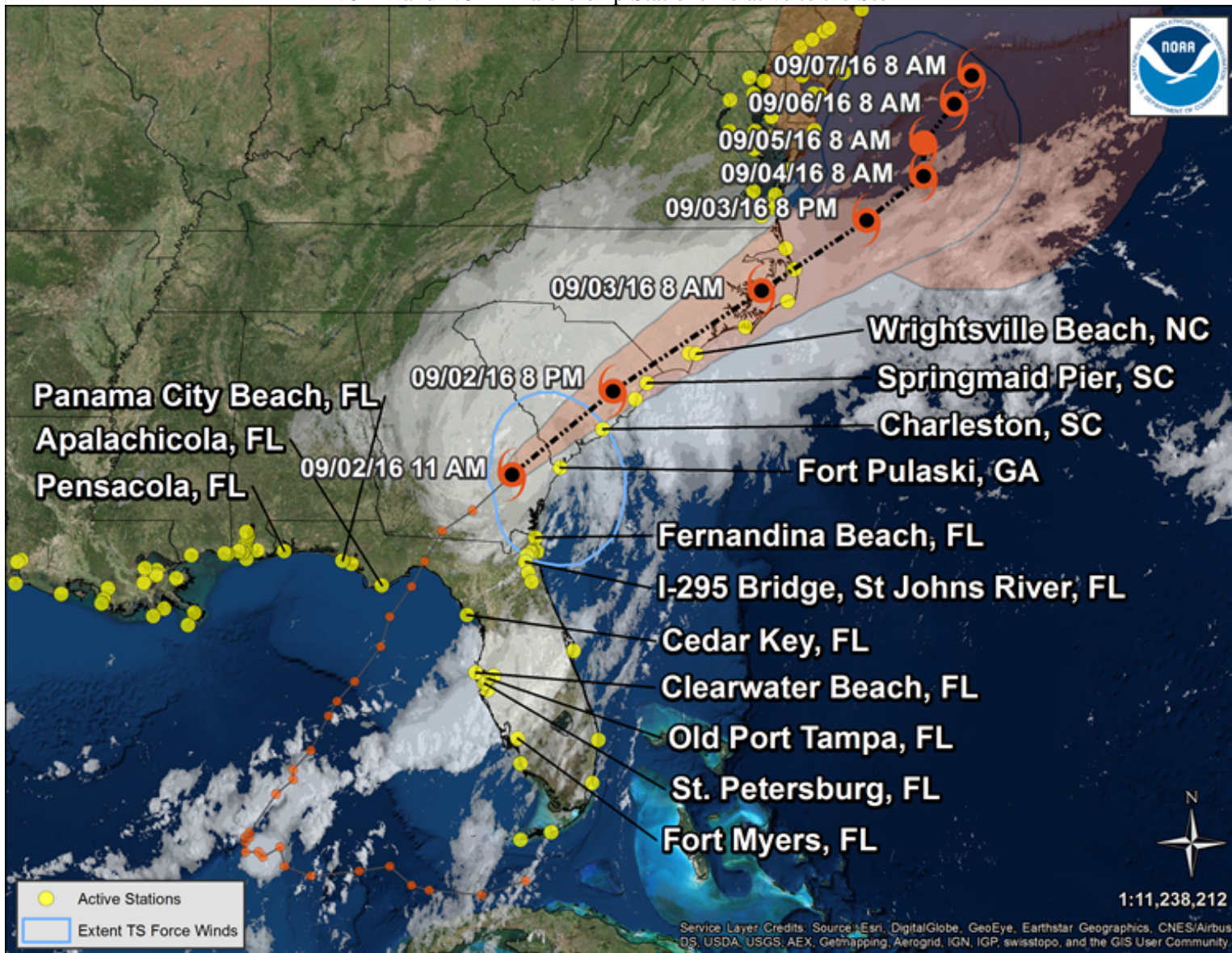




# Tropical Storm HERMINE QuickLook Posted: 12:00 EDT 09/02/2016

## NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 9/02/2016 12:00 EDT, water levels remain elevated along the Gulf Coast from Florida to Mississippi. However, water level residuals (observed minus tide predictions) are beginning to decrease following landfall of Hermine. Throughout Florida on the Gulf coast, water levels are still measuring 1.5-2.5 feet above normal tide levels. Along the southeast U.S. coast, water levels are rising within the St. Johns River at the I-295 Bridge, but observed water levels are no more than 1 foot above tide predictions from St. Johns River, FL to Wrightsville Beach, NC.

Overall, the peak observed water level during Hermine based on preliminary observations was 6.10 feet above Mean Higher High Water at Cedar Key, FL, which if verified would be a record water level for the station.

Winds from Cedar Key to Tampa Bay, FL range from 15 to 30 knots with gusts to 40 knots. Winds are increasing at Fernandina Beach, FL to Springmaid Pier, SC and now range between 15 and 25 kts with higher gusts. Barometric pressure is beginning to rise along the Gulf Coast.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst: ADM

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM HERMINE ADVISORY NUMBER 21  
NWS NATIONAL HURRICANE CENTER MIAMI FL  
1100 AM EDT FRI SEP 02 2016

...HERMINE MOVING INTO SOUTHEASTERN GEORGIA AS HEAVY RAIN AND WINDS SPREAD  
NORTHWARD INTO THE CAROLINAS...  
...DANGEROUS STORM SURGE POSSIBLE FOR PORTIONS OF THE MID-ATLANTIC COAST...

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

The Tropical Storm Warning has been extended northward from Duck, North Carolina, to south of Fenwick Island, Delaware, including the Chesapeake Bay from Drum Point southward, and the Tidal Potomac from Cobb Island eastward.

The Tropical Storm Watch has been extended northward from Sandy Hook, New Jersey, to west of Watch Hill, Rhode Island, including Long Island and New York City.

The Tropical Storm Warning has been discontinued for the Gulf coast of Florida and for the U.S. East coast south of Nassau Sound, Florida.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

- \* Nassau Sound to south of Fenwick Island
- \* Pamlico and Albemarle Sounds
- \* Chesapeake Bay from Drum Point southward
- \* Tidal Potomac from Cobb Island eastward

A Tropical Storm Watch is in effect for...

- \* Fenwick Island to west of Watch Hill

\* Southern Delaware Bay

Interests elsewhere along the United States northeast coast should monitor the progress of this system.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area within 36 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

## DISCUSSION AND 48-HOUR OUTLOOK

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At 1100 AM EDT, the center of Tropical Storm Hermine was inland over southeastern Georgia ABOUT 55 MI WSW OF SAVANNAH GEORGIA and ABOUT 130 MI WSW OF CHARLESTON SOUTH CAROLINA. Hermine is moving toward the northeast near 18 mph and this motion is expected to continue for the next 48 hours with a gradual reduction in forward speed expected on Saturday. On the forecast track the center of Hermine will move across coastal South Carolina later today, move over coastal North Carolina tonight, and move offshore of the North Carolina coast on Saturday.

Maximum sustained winds are near 50 mph with higher gusts. Little change in strength is expected through Saturday morning. Strengthening is forecast once the center of Hermine moves offshore Saturday afternoon.

Tropical-storm-force winds extend outward up to 175 miles, mainly to the east of the center. NOAA buoy 41008, located about 50 miles southeast of Savannah, Georgia, recently reported a sustained wind of 45 mph and a gust of 58 mph. Marsh Island, Georgia, recently reported a sustained wind of 39 mph and a gust of 45 mph.

The estimated minimum central pressure based on surface observations is 989 mb.

## HAZARDS AFFECTING LAND

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**WIND:** Tropical storm conditions are expected to continue near the center of Hermine this afternoon and will spread northward within the warning area along the Atlantic coast today through Saturday. Tropical storm conditions are possible in the watch area on Sunday.

**STORM SURGE:** The combination of a storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. There is the possibility of life-threatening inundation during the next 48 hours at most coastal locations between the North Carolina/Virginia border and Bridgeport, Connecticut. For a depiction of areas at risk, please see the Prototype Storm Surge Watch/Warning graphic, which displays areas that would qualify for inclusion under a storm surge watch or warning currently under development by the National Weather Service and planned for operational use in 2017. The Prototype Graphic is available at [www.hurricanes.gov/graphics\\_at4.shtml?wsurge](http://www.hurricanes.gov/graphics_at4.shtml?wsurge)

The water could reach the following heights above ground if the peak surge occurs at the time of high tide...

NC/VA border to Bridgeport, Connecticut...2 to 4 feet

**RAINFALL:** Hermine is expected to produce storm total rainfall accumulations of 5 to 10 inches with possible isolated maximum amounts of 15 inches over the southeastern United States and portions of the mid-Atlantic from

southern and eastern Georgia into South Carolina, eastern North Carolina, southeast Virginia, and the lower Eastern Shore of Virginia and Maryland. These rains may cause life-threatening floods and flash floods. Inflow bands south of Hermine are expected to bring an additional 1 to 3 inches of rainfall across portions of central and northern Florida through today. Heavy rainfall could reach the coastal areas of Delaware and New Jersey beginning Saturday night.

TORNADOES: A few tornadoes are possible across coastal portions of North and South Carolina today.

#### NEXT ADVISORY

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Next intermediate advisory at 200 PM EDT.

Next complete advisory at 500 PM EDT.

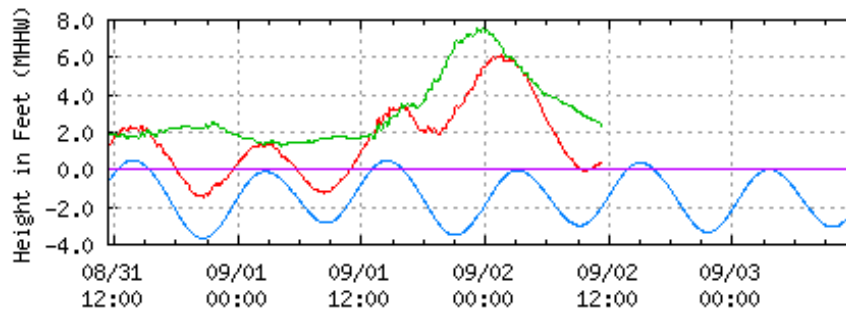
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Forecaster Brennan

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Cedar Key - Water Level](#), [Cedar Key - Winds](#), [Cedar Key - Barometric](#), [Clearwater Beach - Water Level](#), [Clearwater Beach - Winds](#), [Clearwater Beach - Barometric](#), [St Petersburg, Tampa Bay - Water Level](#), [St Petersburg, Tampa Bay - Winds](#), [St Petersburg, Tampa Bay - Barometric](#), [Old Port Tampa - Water Level](#), [Old Port Tampa - Winds](#), [Fort Myers - Water Level](#), [Fort Myers - Winds](#), [Apalachicola - Water Level](#), [Apalachicola - Winds](#), [Panama City Beach - Water Level](#), [Panama City Beach - Winds](#), [Pensacola - Water Level](#), [Pensacola - Winds](#), [Pensacola - Barometric](#), [I-295 Bridge, St Johns River - Water Level](#), [I-295 Bridge, St Johns River - Winds](#), [Fernandina Beach - Water Level](#), [Fernandina Beach - Winds](#), [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#)

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 09/02/2016 11:24 (EDT). Data relative to MHHW

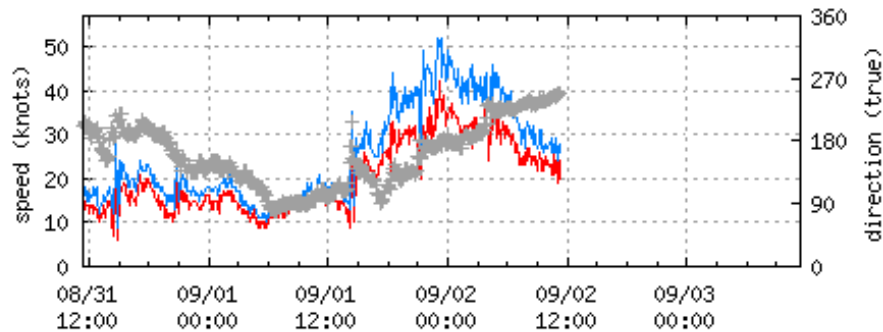
Observed: 0.43 ft. Predicted: -1.92 ft. Residual: 2.35 ft.

Historical Maximum Water Level: Oct 7 1996, 5.15 ft.

Next High Tide: 09/02/2016 15:06 (EDT), 0.38 ft.

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Wind Speed / Gusts / Direction

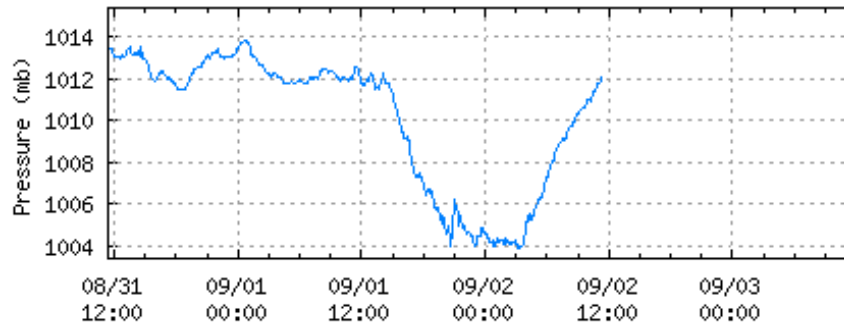


speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:24 (EDT)

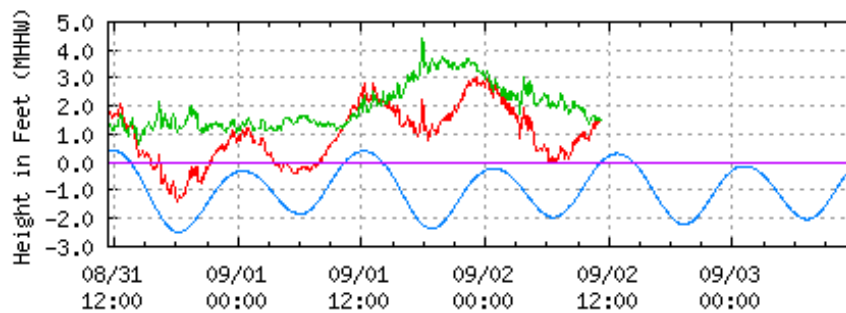
Wind Speed: 21 knots Gusts: 24 knots Direction: 247° T

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 09/02/2016 11:24 (EDT)  
Barometric Pressure: 1012.1 mb

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

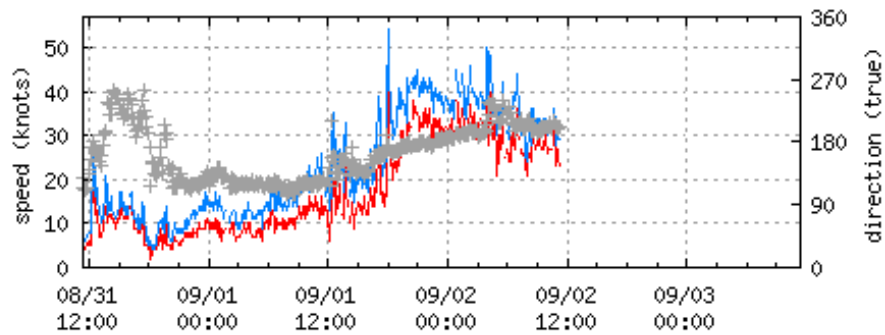
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: 1.52 ft. Predicted: 0.04 ft. Residual: 1.48 ft.

Historical Maximum Water Level: Mar 13 1993, 4.00 ft.

Next High Tide: 09/02/2016 12:48 (EDT), 0.31 ft.

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL  
Wind Speed / Gusts / Direction

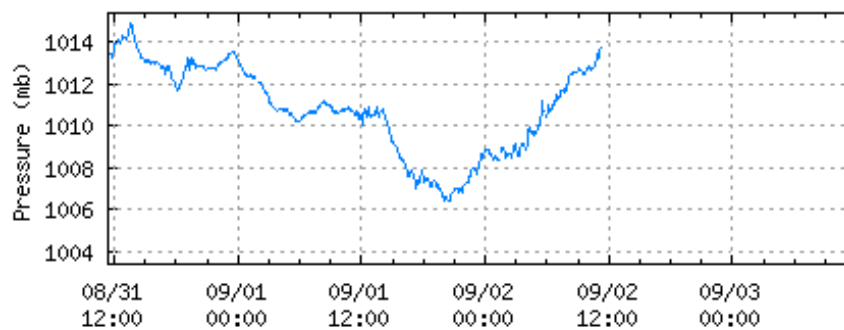


speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 23 knots Gusts: 27 knots Direction: 199° T

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL  
Barometric Pressure



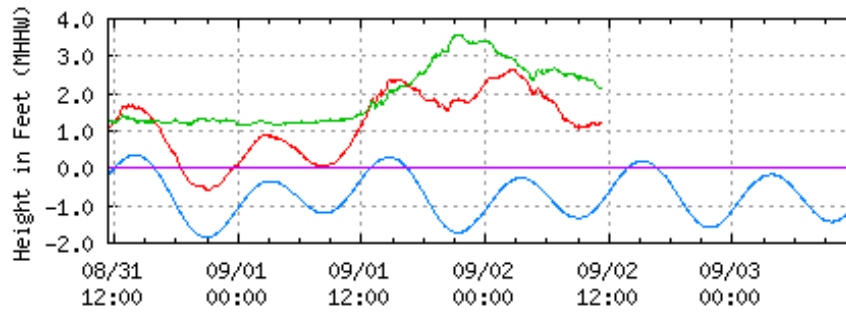
barometric pressure —

Last Observed Sample: 09/02/2016 11:18 (EDT)

Barometric Pressure: 1013.9 mb



NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

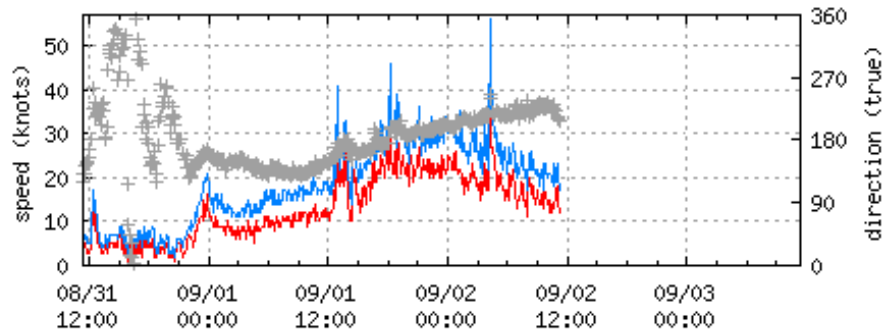
Last Observed Sample: 09/02/2016 11:12 (EDT). Data relative to MHHW

Observed: 1.22 ft. Predicted: -0.93 ft. Residual: 2.15 ft.

Historical Maximum Water Level: Aug 31 1985, 4.00 ft.

Next High Tide: 09/02/2016 15:19 (EDT), 0.20 ft.

NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL  
Wind Speed / Gusts / Direction



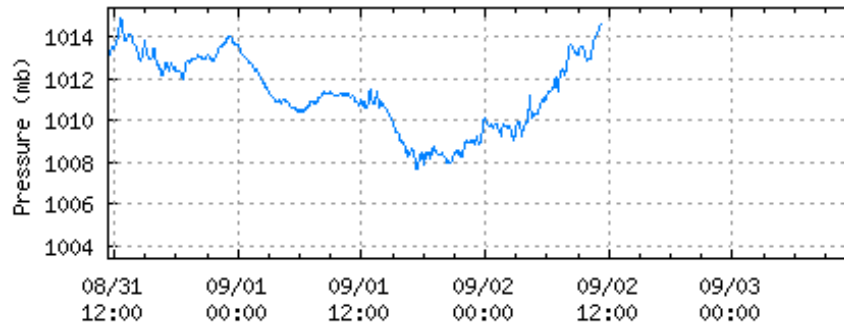
speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:12 (EDT)

Wind Speed: 12 knots Gusts: 17 knots Direction: 207° T

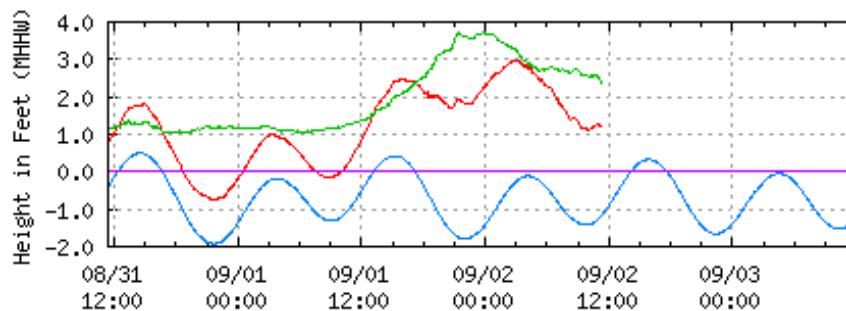


NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 09/02/2016 11:12 (EDT)  
Barometric Pressure: 1014.6 mb

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

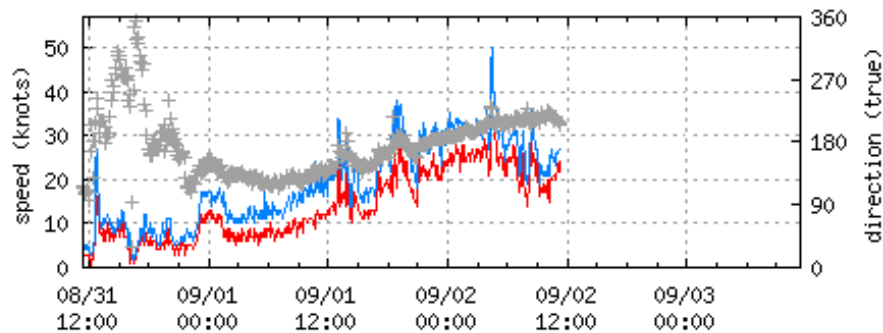
Observed: 1.20 ft. Predicted: -1.17 ft. Residual: 2.37 ft.

Historical Maximum Water Level: Oct 8 1996, 3.60 ft.

Next High Tide: 09/02/2016 15:54 (EDT), 0.32 ft.

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

Wind Speed / Gusts / Direction



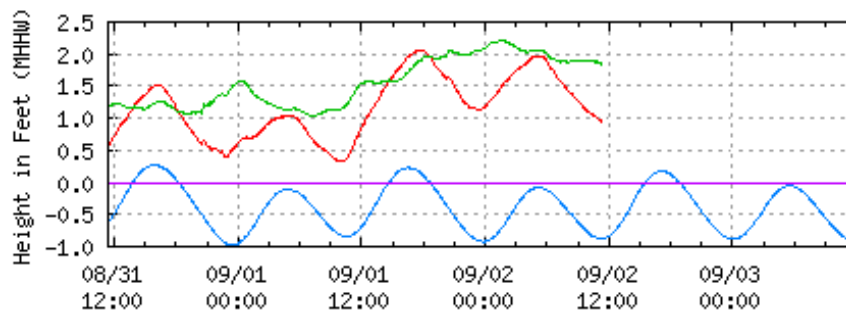
speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 22 knots Gusts: 27 knots Direction: 206° T

NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —  
Observed WL —

(Obs-Pred) —  
MHHW —

Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

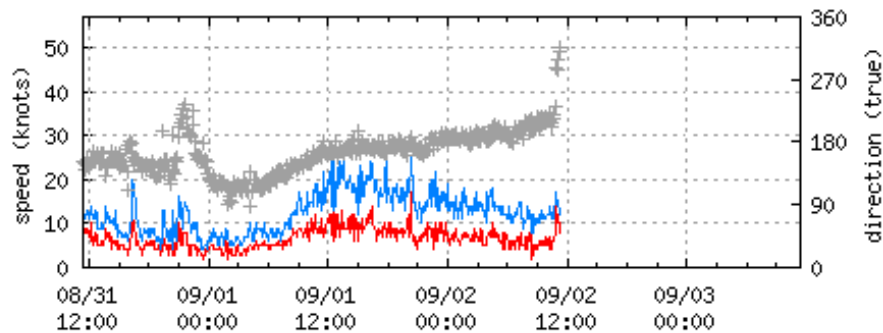
Observed: 0.94 ft. Predicted: -0.88 ft. Residual: 1.82 ft.

Historical Maximum Water Level: Nov 23 1988, 3.41 ft.

Next High Tide: 09/02/2016 17:07 (EDT), 0.17 ft.

NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Wind Speed / Gusts / Direction



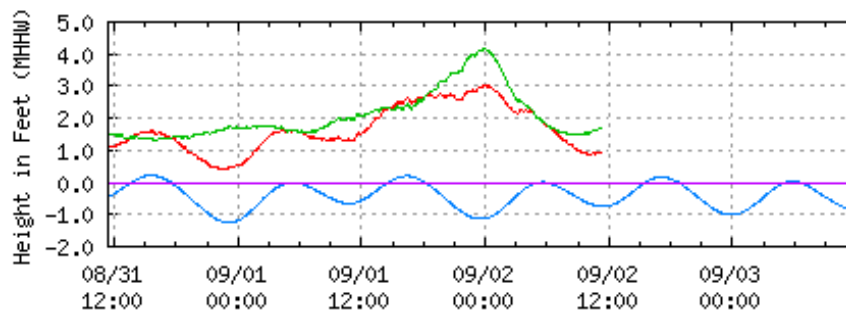
speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 8 knots Gusts: 12 knots Direction: 311° T

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —  
Observed WL —

(Obs-Pred) —  
MHHW —

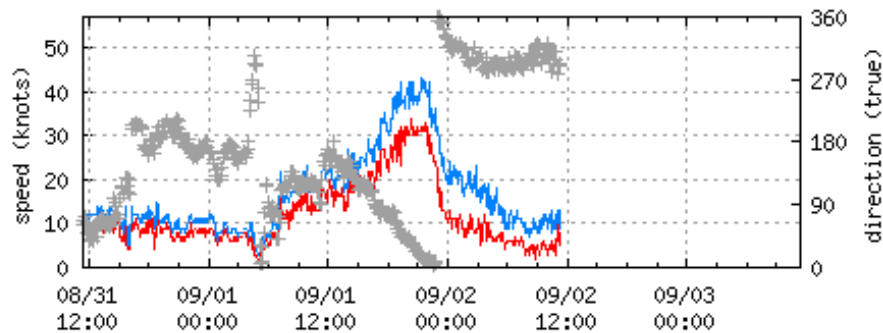
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: 0.96 ft. Predicted: -0.75 ft. Residual: 1.71 ft.

Historical Maximum Water Level: Jul 10 2005, 6.43 ft.

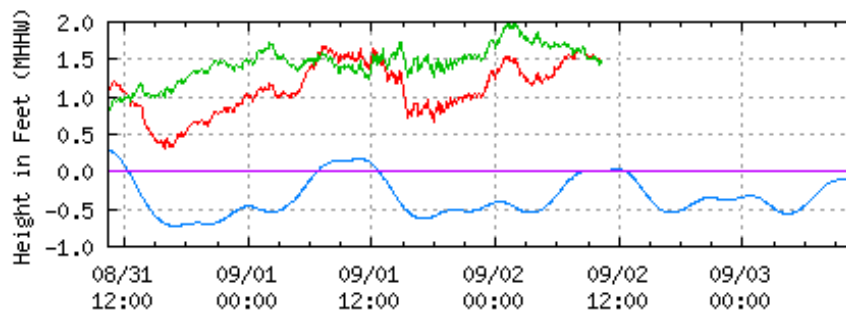
Next High Tide: 09/02/2016 17:08 (EDT), 0.16 ft.

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL  
Wind Speed / Gusts / Direction



speed — gusts — direction +  
Last Observed Sample: 09/02/2016 11:18 (EDT)  
Wind Speed: 8 knots Gusts: 13 knots Direction: 289° T

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

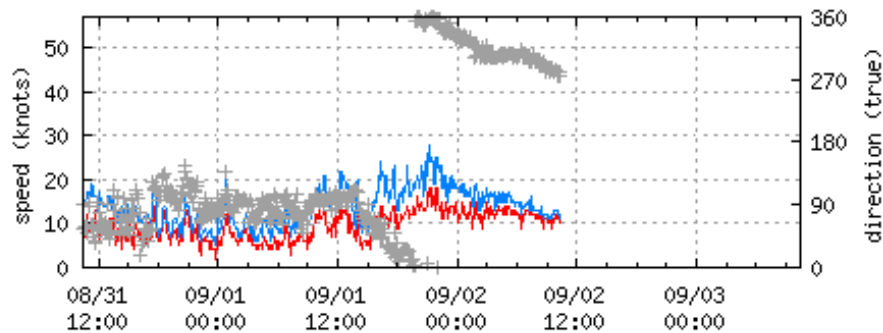
Last Observed Sample: 09/02/2016 10:24 (CDT). Data relative to MHHW

Observed: 1.51 ft. Predicted: 0.01 ft. Residual: 1.50 ft.

Historical Maximum Water Level: Oct 4 1995, 6.84 ft.

Next High Tide: 09/02/2016 11:46 (CDT), 0.03 ft.

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL  
Wind Speed / Gusts / Direction

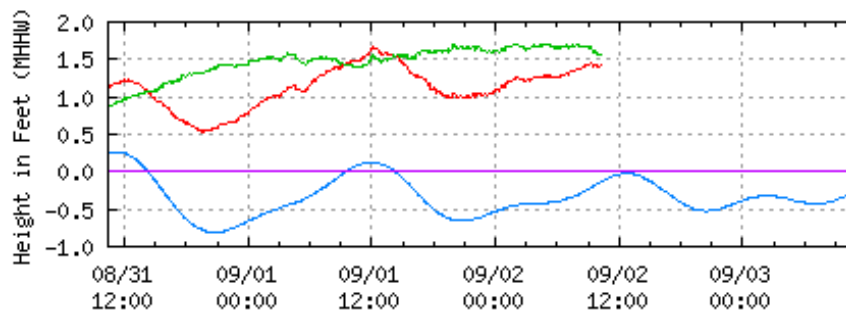


speed — gusts — direction +

Last Observed Sample: 09/02/2016 10:24 (CDT)

Wind Speed: 11 knots Gusts: 12 knots Direction: 275° T

NOAA/NOS/CO-OPS 8729840 Pensacola, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —  
Observed WL —

(Obs-Pred) —  
MHHW —

Last Observed Sample: 09/02/2016 10:18 (CDT). Data relative to MHHW

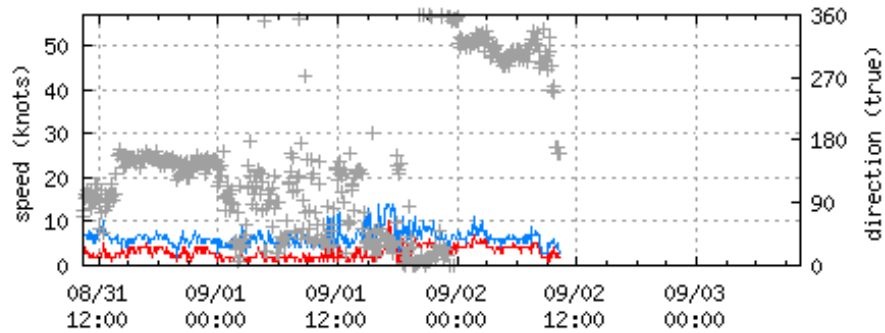
Observed: 1.43 ft. Predicted: -0.13 ft. Residual: 1.56 ft.

Historical Maximum Water Level: Sep 18 1926, 7.41 ft.

Next High Tide: 09/02/2016 12:46 (CDT), -0.02 ft.

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Wind Speed / Gusts / Direction



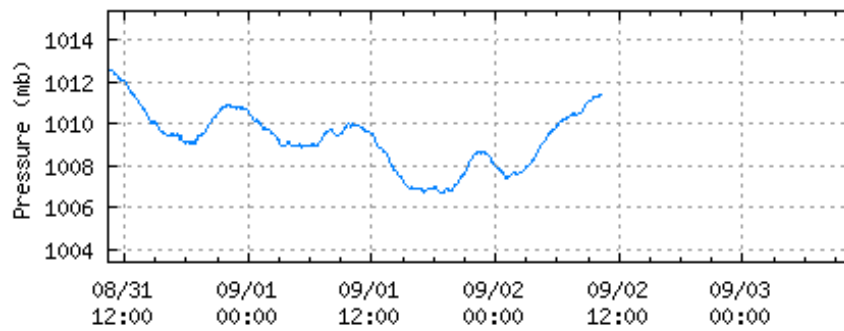
speed — gusts — direction +

Last Observed Sample: 09/02/2016 10:18 (CDT)

Wind Speed: 1 knots Gusts: 3 knots Direction: 150° T

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Barometric Pressure

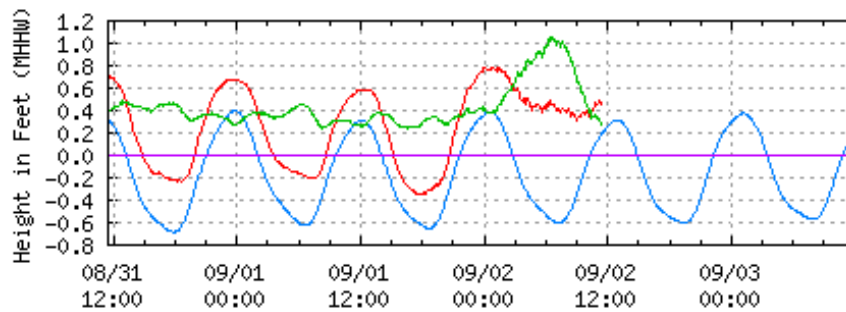


barometric pressure —

Last Observed Sample: 09/02/2016 10:18 (CDT)

Barometric Pressure: 1011.4 mb

NOAA/NOS/CO-OPS 8720357 I-295 Bridge, St Johns River, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

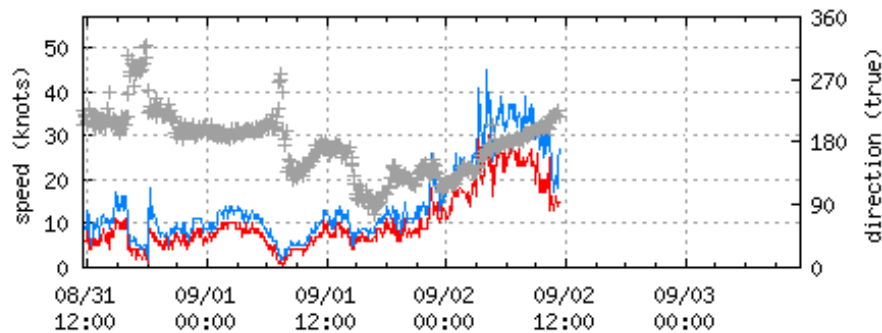
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: 0.45 ft. Predicted: 0.18 ft. Residual: 0.27 ft.

Historical Maximum Water Level: Sep 27 2004, 3.46 ft.

Next High Tide: 09/02/2016 12:57 (EDT), 0.31 ft.

NOAA/NOS/CO-OPS 8720357 I-295 Bridge, St Johns River, FL  
Wind Speed / Gusts / Direction



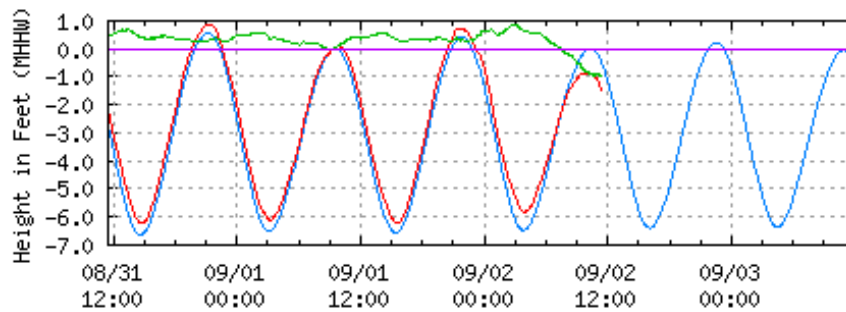
speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 15 knots Gusts: 27 knots Direction: 218° T



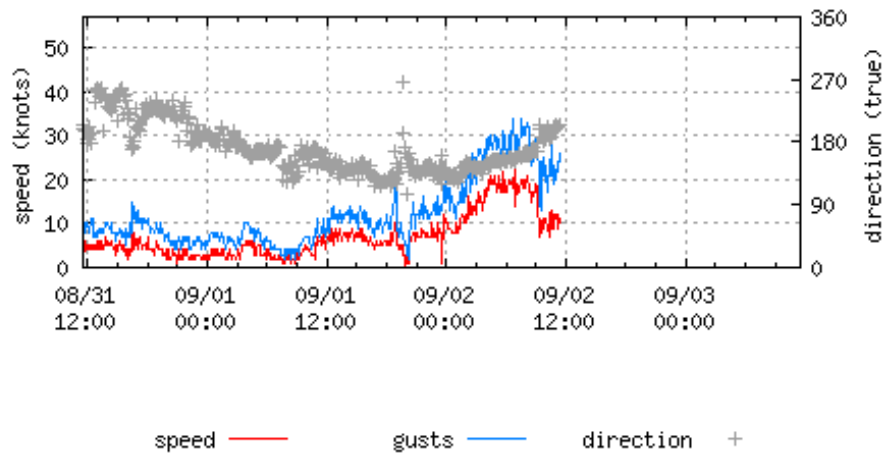
NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

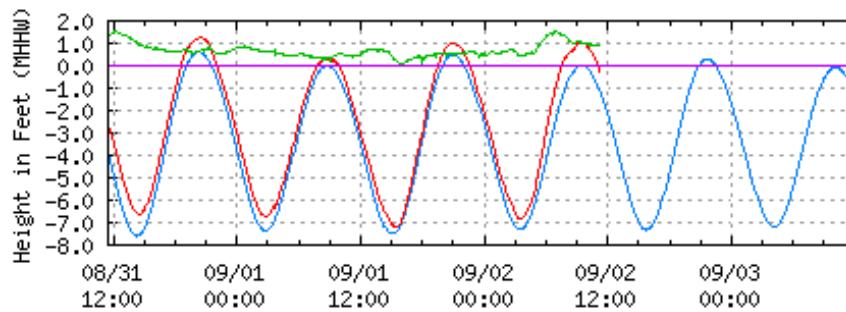
Last Observed Sample: 09/02/2016 11:24 (EDT). Data relative to MHHW  
**Observed: -1.49 ft. Predicted: -0.50 ft. Residual: -0.99 ft.**  
 Historical Maximum Water Level: Oct 2 1898, 6.94 ft.  
 Next High Tide: 09/02/2016 22:34 (EDT), 0.22 ft.

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL  
Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 11:24 (EDT)  
**Wind Speed: 11 knots Gusts: 26 knots Direction: 204° T**

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

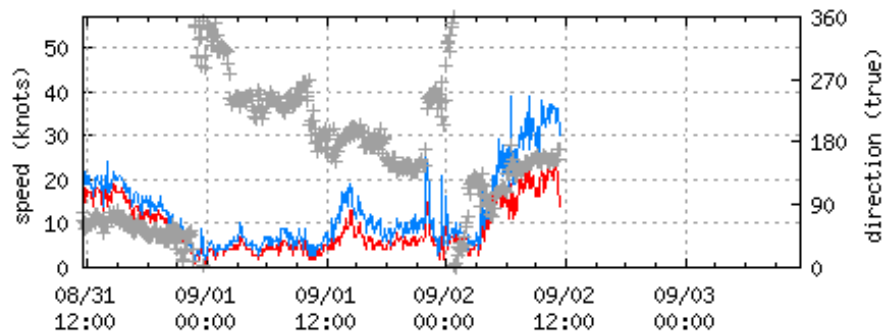
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: -0.23 ft. Predicted: -1.11 ft. Residual: 0.88 ft.

Historical Maximum Water Level: Oct 15 1947, 3.40 ft.

Next High Tide: 09/02/2016 21:40 (EDT), 0.30 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA  
Wind Speed / Gusts / Direction

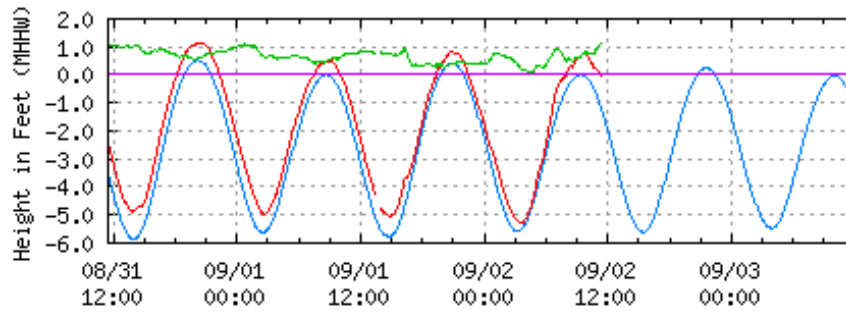


speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 14 knots Gusts: 30 knots Direction: 169° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

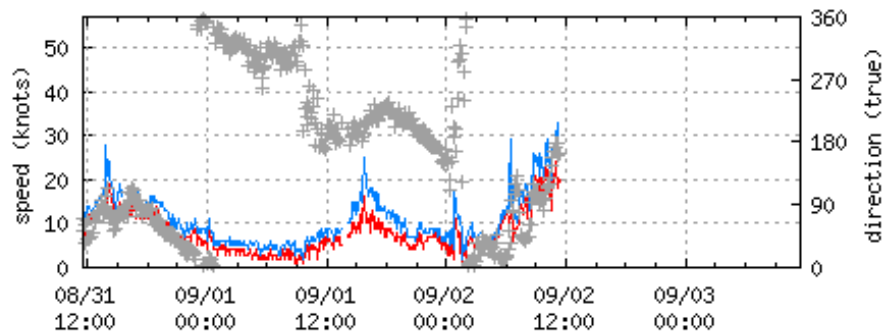
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: -0.03 ft. Predicted: -1.14 ft. Residual: 1.11 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 09/02/2016 21:33 (EDT), 0.25 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, SC  
Wind Speed / Gusts / Direction

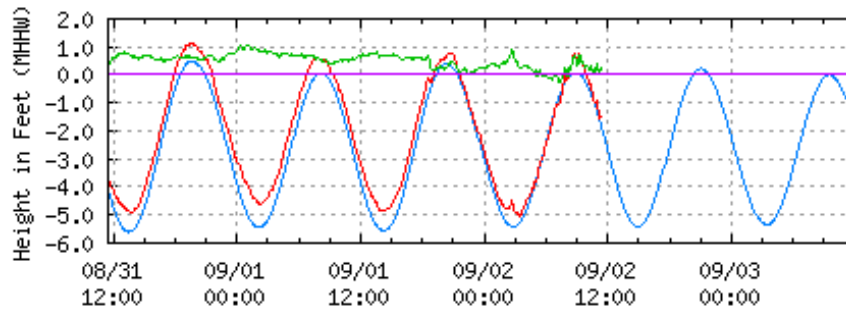


speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 20 knots Gusts: 27 knots Direction: 165° T

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

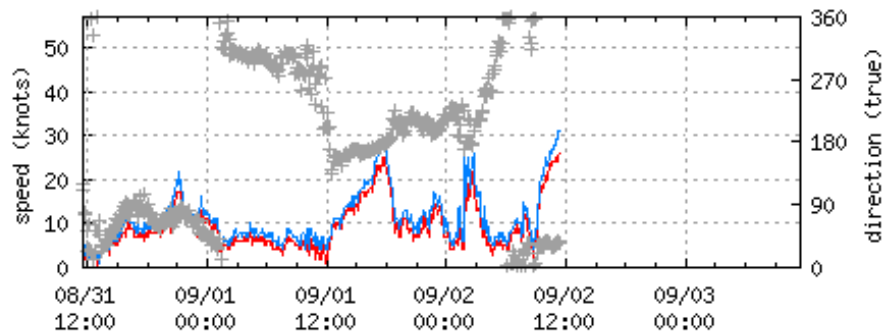
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: -1.51 ft. Predicted: -1.77 ft. Residual: 0.26 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft.

Next High Tide: 09/02/2016 21:00 (EDT), 0.22 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC  
Wind Speed / Gusts / Direction

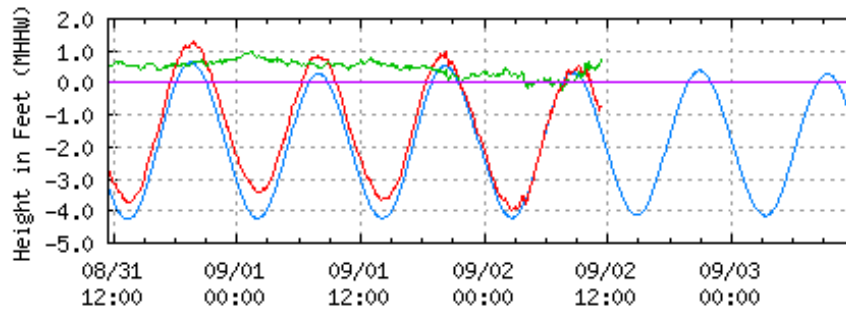


speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 26 knots Gusts: 31 knots Direction: 35° T

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

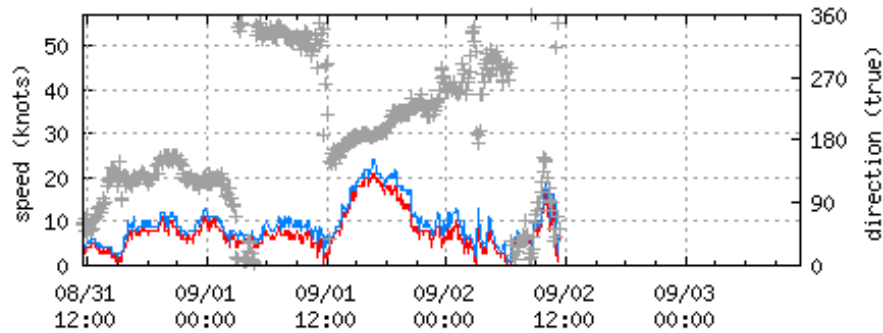
Last Observed Sample: 09/02/2016 11:18 (EDT). Data relative to MHHW

Observed: -0.75 ft. Predicted: -1.47 ft. Residual: 0.72 ft.

Historical Maximum Water Level: Sep 25 2008, 2.81 ft.

Next High Tide: 09/02/2016 20:55 (EDT), 0.38 ft.

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Wind Speed / Gusts / Direction



speed — gusts — direction +

Last Observed Sample: 09/02/2016 11:18 (EDT)

Wind Speed: 7 knots Gusts: 8 knots Direction: 53° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8727520	Cedar Key, FL	09/02/2016 11:24 (EDT)	0.43 ft	-1.92 ft	2.35 ft	6.10 ft
8726724	Clearwater Beach, FL	09/02/2016 11:18 (EDT)	1.52 ft	0.04 ft	1.48 ft	3.00 ft
8726520	St Petersburg, Tampa Bay, FL	09/02/2016 11:12 (EDT)	1.22 ft	-0.93 ft	2.15 ft	2.64 ft
8726607	Old Port Tampa, FL	09/02/2016 11:18 (EDT)	1.20 ft	-1.17 ft	2.37 ft	2.98 ft
8725520	Fort Myers, FL	09/02/2016 11:18 (EDT)	0.94 ft	-0.88 ft	1.82 ft	2.06 ft
8728690	Apalachicola, FL	09/02/2016 11:18 (EDT)	0.96 ft	-0.75 ft	1.71 ft	3.04 ft
8729210	Panama City Beach, FL	09/02/2016 10:24 (CDT)	1.51 ft	0.01 ft	1.50 ft	1.67 ft
8729840	Pensacola, FL	09/02/2016 10:18 (CDT)	1.43 ft	-0.13 ft	1.56 ft	1.68 ft
8720357	I-295 Bridge, St Johns River, FL	09/02/2016 11:18 (EDT)	0.45 ft	0.18 ft	0.27 ft	0.78 ft
8720030	Fernandina Beach, FL	09/02/2016 11:24 (EDT)	-1.49 ft	-0.50 ft	-0.99 ft	0.73 ft
8670870	Fort Pulaski, GA	09/02/2016 11:18 (EDT)	-0.23 ft	-1.11 ft	0.88 ft	1.08 ft
8665530	Charleston, SC	09/02/2016 11:18 (EDT)	-0.03 ft	-1.14 ft	1.11 ft	0.85 ft
8661070	Springmaid Pier, SC	09/02/2016 11:18 (EDT)	-1.51 ft	-1.77 ft	0.26 ft	0.79 ft
8658163	Wrightsville Beach, NC	09/02/2016 11:18 (EDT)	-0.75 ft	-1.47 ft	0.72 ft	0.96 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
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